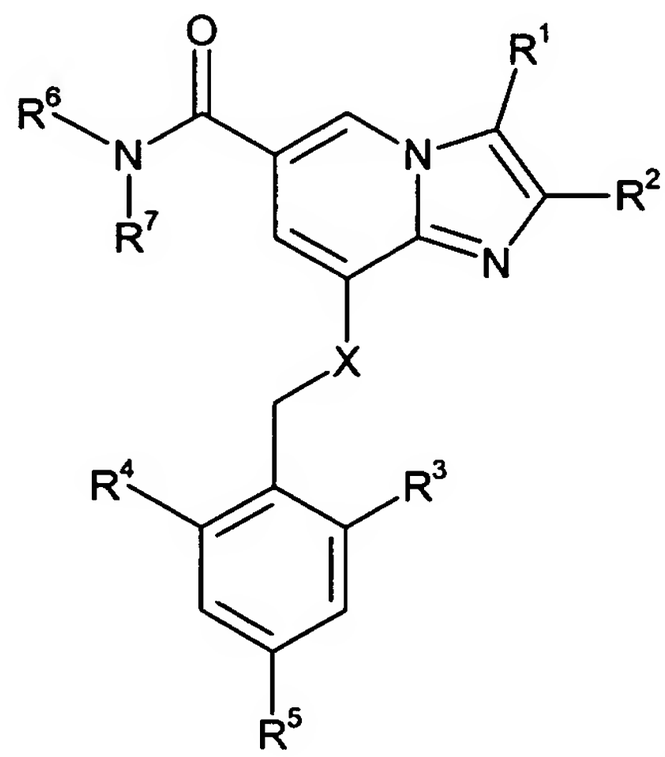
Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

1-19. (Canceled)

20. (New) A method for the treatment of sleep disturbance due to silent gastro-esophageal reflux, the method comprising administering an effective amount of a potassium-competitive acid blocker (P-CAB) to a patient in need thereof.

21. (New) The method according to claim 20, wherein the P-CAB is a compound having Formula I,



I

or a pharmaceutically acceptable salt thereof, wherein

R^1 is: (a) H,

(b) CH_3, or

(c) CH_2OH;

R^2 is: (a) CH_3, or

(b) CH_2CH_3;

R^3 is: (a) H,

(b) C_1-C_6 alkyl,

(c) hydroxylated C_1-C_6 alkyl, or

(d) halogen;

R^4 is: (a) H,

(b) C_1-C_6 alkyl,

(c) hydroxylated C_1-C_6 alkyl, or

(d) halogen;

R^5 is: (a) H, or

(b) halogen;

R^6 and R^7 are the same or different and are independently selected from:

(a) H,

(b) C_1-C_6 alkyl,

(c) hydroxylated C_1-C_6 alkyl, and

(d) C_1-C_6 alkoxy-substituted C_1-C_6 alkyl; and

X is: (a) NH, or

(b) O.

22. (New) The method according to claim 21, wherein

R^1 is CH_3 or CH_2OH;

R^2, R^3 and R^4 are the same or different and independently selected from CH_3 and CH_2CH_3;

R^5 is H, Br, Cl, or F; and

R^6, R^7 are the same or different and independently selected from H, C_1-C_6 alkyl and hydroxylated C_1-C_6 alkyl.

23. (New) The method according to claim 20, wherein the P-CAB compound is selected from the group consisting of:

8-(2-ethyl-6-methylbenzylamino)-3-hydroxymethyl-2-methylimidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2-ethyl-6-methylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

8-(2-ethyl-6-methylbenzylamino)-N,2,3-trimethylimidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2,6-dimethylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2-ethyl-4-fluoro-6-methylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2,6-dimethyl-4-fluoro-benzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2,6-diethylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

2,3 dimethyl-8-(2-ethyl-6-methylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide, and

2,3 dimethyl-8-(2-ethyl-6-methylbenzylamino)-N-(2-methoxyethyl)-imidazo[1,2-a]pyridine-6-carboxamide.

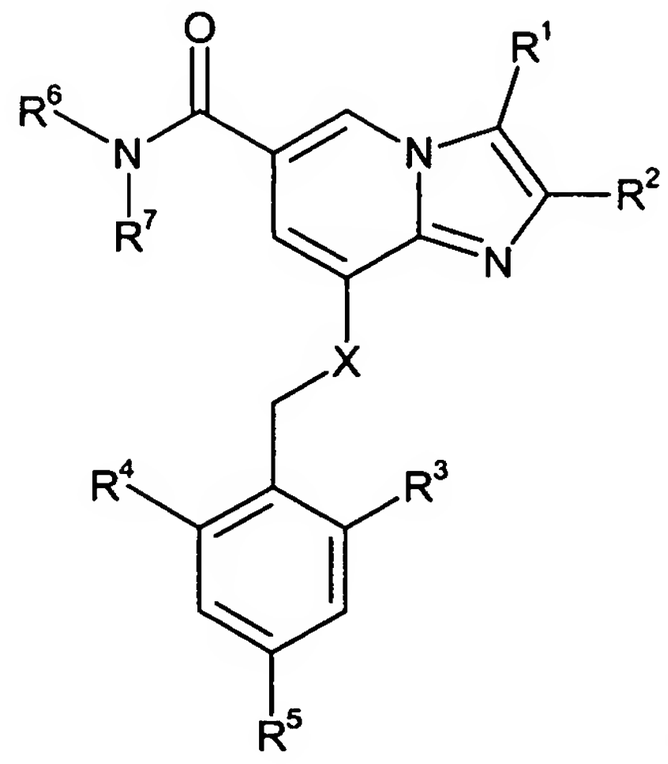
24. (New) The method according to any one of claims 21-23, wherein the P-CAB compound is in the form of a hydrochloride salt or mesylate salt.

25. (New) A pharmaceutical formulation for the treatment of sleep disturbance due to silent gastro-esophageal reflux, the formulation comprising a P-CAB compound as active ingredient and one or more pharmaceutically acceptable diluents or carriers.

26. (New) The pharmaceutical formulation according to claim 25, wherein the formulation is formulated for immediate release of the active ingredient.

27. (New) The pharmaceutical formulation according to claim 25, wherein the formulation is formulated for modified release of the active ingredient.

28. (New) The pharmaceutical formulation according to claim 25, wherein the P-CAB compound is Formula I,



I

or a pharmaceutically acceptable salt thereof, wherein

R^1 is: (a) H,

(b) CH_3, or

(c) CH_2OH;

R^2 is: (a) CH_3, or

(b) CH_2CH_3;

R^3 is: (a) H,

(b) C_1-C_6 alkyl,

(c) hydroxylated C_1-C_6 alkyl, or

(d) halogen;

R^4 is: (a) H,

(b) C_1-C_6 alkyl,

(c) hydroxylated C_1-C_6 alkyl, or

(d) halogen;

R^5 is: (a) H, or

(b) halogen;

R^6 and R^7 are the same or different and are independently selected from:

(a) H,

(b) C_1-C_6 alkyl,

(c) hydroxylated C_1-C_6 alkyl, and

(d) C_1-C_6 alkoxy-substituted C_1-C_6 alkyl; and

X is: (a) NH, or

(b) O.

29. (New) The formulation according to claim 28, wherein:

R^1 is CH_3 or CH_2OH;

R^2, R^3 and R^4 are the same or different and independently selected from CH_3 and CH_2CH_3;

R^5 is H, Br, Cl, or F; and

R^6, R^7 are the same or different and independently selected from H, C_1-C_6 alkyl and hydroxylated C_1-C_6 alkyl.

30. (New) The formulation according to claim 25, wherein the P-CAB compound is selected from the group consisting of:

8-(2-ethyl-6-methylbenzylamino)-3-hydroxymethyl-2-methylimidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2-ethyl-6-methylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

8-(2-ethyl-6-methylbenzylamino)-N,2,3-trimethylimidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2,6-dimethylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2-ethyl-4-fluoro-6-methylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2,6-dimethyl-4-fluoro-benzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

2,3-dimethyl-8-(2,6-diethylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

2,3 dimethyl-8-(2-ethyl-6-methylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide, and

2,3 dimethyl-8-(2-ethyl-6-methylbenzylamino)-N-(2-methoxyethyl)-imidazo[1,2-a]pyridine-6-carboxamide.

31. (New) The formulation according to any one of claims 28-30, wherein the P-CAB compound is in the form of a hydrochloride salt or mesylate salt.

32. (New) A method for the treatment of sleep disturbance due to silent gastro-esophageal reflux, the method comprising administering an effective amount of a reversible proton pump inhibitors to a patient in need thereof.

33. (New) The method according to claim 32, wherein the proton pump inhibitor is soraprazan.

34. (New) A pharmaceutical formulation for the treatment of sleep disturbance due to silent gastro-esophageal reflux, the formulation comprising a reversible proton pump inhibitors as active ingredient and one or more pharmaceutically acceptable diluents or carriers.

35. (New) The pharmaceutical formulation according to claim 34, wherein the formulation is formulated for immediate release of the active ingredient.

36. (New) The pharmaceutical formulation according to claim 34, wherein the formulation is formulated for modified release of the active ingredient.

37. (New) The pharmaceutical formulation according to claim 34, wherein the proton pump inhibitor is soraprazan.